

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-12. (canceled).

13. (currently amended): A fluid dispensing circuit comprising:

a pump comprising a variable-volume chamber and a head;

wherein said head comprises a main body in which an inlet duct and an output duct communicate with said variable volume chamber; and

wherein a second valve is inserted in said inlet duct and a third valve is inserted in said outlet duct;

a delivery duct connected to said output duct and a nozzle; and

a first one-way valve located along the delivery duct and outside said pump,

wherein the first one-way valve is formed to withstand higher pressure than the third valve.

14. (canceled).

15. (previously presented): A dispensing circuit according to Claim 13, wherein said second valve progressively opens during expansion of said variable-volume chamber when fluid is drawn from a reservoir and said third valve is closed.

16. (previously presented): A dispensing circuit according to Claim 15, wherein when a desired amount of fluid has been drawn into said variable-volume chamber, said variable-volume chamber begins contracting, said second valve closes and said third valve opens.

17. (previously presented): A dispensing circuit according to Claim 16, wherein when said third valve opens, fluid passes toward said delivery duct, opens said first one-way valve and continues to said nozzle.

18. (previously presented): A dispensing circuit according to Claim 13, wherein said main body delimits the variable-volume chamber at least partially; wherein said outlet duct is formed partially inside said main body; and wherein said delivery duct extends partially outside said main body.

19. (currently amended): A dispensing circuit according to Claim 18, wherein at least one of the one-way valve and third valve comprises:

- a hollow body;
- a closure member comprising a flat abutment surface;
- an abutment inside the hollow body comprising the ridge of a knife-edged element shaped for bearing against the flat abutment[1,];
- and resilient means associated with said closure member for pressing it against said knife-edged element.

20. (previously presented): A dispensing circuit according to Claim 13, wherein a filter is mounted externally upstream of the at least one of the one-way valve and third valve.

21. (previously presented): A dispensing circuit according to Claim 19, wherein the at least one of the one-way valve and third valve that is mounted in the output duct comprises a filter.

22. (previously presented): A dispensing circuit according to Claim 19, wherein the at least one of the one-way valve and third valve that is mounted in the output duct comprises a resilient seal interposed between said flat abutment surface and said ridge of the knife-edged element.

23. (previously presented): A dispensing circuit according to Claim 13, wherein said second valve is partially open in the rest position.

24. (previously presented): A dispensing circuit according to Claim 23, wherein said second valve has a travel which is different from the travel of the at least one of the one-way valve and third valve.

25. (previously presented): A dispensing circuit according to Claim 24 wherein each of said first one-way valve, second valve and third valve comprises
a hollow body;

a closure member mounted movably inside said hollow body, wherein said closure member comprises a flat abutment surface; and

an abutment inside said hollow body comprises the ridge of a knife-edged element shaped far bearing against said flat abutment surface;

and resilient means mounted between the closure member and the hollow body.

26. (previously presented): A dispensing circuit, according to claim 13, wherein the pump comprise a bellows pump.

27. (previously presented): A machine for dispensing fluids, comprising at least one reservoir of fluids to be dispensed, wherein it comprises at least one dispensing circuit according to any one of claims 13-26, and wherein said pump is connected to the at least one reservoir.

28. (previously presented): A dispensing machine according to claim 27, wherein it comprises a control system for controlling the pump so as to deliver a predetermined quantity of fluid.

29. (new): A fluid dispensing circuit comprising:

a pump comprising a variable-volume chamber and a head;

wherein said head comprises a main body in which an inlet duct and an output duct communicate with said variable volume chamber;

wherein a second valve is inserted in said inlet duct and a third valve is inserted in said outlet duct; and

wherein said variable-volume chamber comprises at least one flexible wall;
a delivery duct connected to said output duct and a nozzle; and
a first one-way valve located along the delivery duct and outside said pump.

30. (new): The dispensing circuit according to Claim 13, wherein the second valve and third valve are the same type of valve.

31. (new): The dispensing circuit according to Claim 13, wherein the second valve and third valve are oriented in opposite directions.

32. (new): A fluid dispensing circuit comprising:
a pump comprising a variable-volume chamber and a head;
wherein said head comprises a main body in which an inlet duct and an output duct communicate with said variable volume chamber; and
wherein a second valve is inserted in said inlet duct and a third valve is inserted in said outlet duct;
a delivery duct connected to said output duct and a nozzle; and
a first one-way valve located along the delivery duct and outside said pump,
wherein the third valve is fixed within the outlet duct.